

R E M A R K S / A R G U M E N T S

Reconsideration of the present application, as amended, is respectfully requested.

The November 6, 2006 Office Action and the Examiner's comments have been carefully considered. In response, the drawings and claims are amended, and remarks are set forth below in a sincere effort to place the present application in form for allowance. The amendments are supported by the application as originally filed. Therefore, no new matter is added.

SPECIFICATION

In the Office Action the specification is objected to as not containing section headings. The specification has not been amended to include section headings as requested by the Examiner since section headings are not required by MPEP Section 608.01(a).

DRAWINGS

In the Office Action the drawings are objected to as not containing labeled diagrammatic blocks indicating contents or function. In response, annotated sheets showing changes to the drawings which include labels indicative of the contents or

function in each of the diagrammatic blocks in Figs. 1 and 2 are submitted herewith.

REJECTION UNDER 35 USC 101

In the Office Action, claim 12 is rejected under 35 USC 101 because the Examiner contends that the present claimed invention is directed to non-statutory subject matter.

In response, claim 12 is amended to recite that the processor program product is embodied in computer-readable media and thus is now directed to statutory subject matter.

PRIOR ART REJECTIONS

In the Office Action, claims 1, 6 and 11-13 are rejected under 35 USC 102(e) as being anticipated by U.S. Patent Publication 2001/0021199 (Lee et al.). Claims 2-5 and 7-10 are rejected by 35 USC 103(a) as being unpatentable over Lee et al. in view of U.S. Patent Publication No. 2001/0019578 (Arima).

In response, independent claims 1, 6, 11, 12 and 13 are amended to clarify the invention.

A feature of the present claimed invention as defined by amended independent claims 1, 6, 11, 12 and 13 is that iterative correlations being performed by a plurality of correlators are optimized. Specifically, in first correlations, the same code signal having a first length smaller than the code length is

directed to all of the correlators while in second correlations, the same code signal having a second length larger than the first length and smaller than or equal to the code length is directed to only a portion of the correlators. The correlators used in the second correlation are preferably selected based on the results of the first correlations. Thus, in one embodiment of the invention, the correlation is iterative in that the correlators used in each correlation after the initial one are determined based on the preceding correlation, i.e., they are those which provide the best correlation results from the immediately preceding correlation. The iterative correlation process continues until a single correlator is determined which provides the best correlation result using the entire code length. This aspect of the iterative correlations in accordance with the invention are described in the specification at page 5, line 26 to page 7, line 21.

A feature of the present claimed invention to identify the best correlator to process a code signal is that the same code signals are used in each correlation. In the example in the specification, the partial code signals in the first correlation are the first 32 chips of the 64-chip code length, and these first 32 chips are provided to all 32 correlators (see page 5, lines 29-32). Thereafter, in the second correlations, the first 48 chips of the 64-chip code length are provided to only a

portion of the correlators, i.e., 12 correlators (see page 6, lines 26-30). Using the same code signals in each correlation, when multiple correlators are being used, facilitates a determination of which correlator will provide the best correlation result when the entire code length is input, without unnecessarily taxing the processing capacity of the correlation system.

The cited prior art does not disclose, teach or suggest all of the features now set forth in independent claims 1, 6, 11, 12 and 13.

Lee et al. teach a correlation system in which a plurality of code signals are input to a single one of a plurality of correlators or alternatively, a single one of the code signals is input to all of the plurality of correlators in parallel. Lee et al. do not, however, disclose, teach or suggest providing only a portion of a code signal to all of the correlators and then directing a larger portion of the code signal to a subset of the correlators selected based on the results of the preceding correlation.

Arima teaches a correlation system wherein initially, code signals (phases) are partitioned into search windows equal in number to the correlators such that only a portion of each code signal is input into each correlator, i.e., that portion assigned to the search window being processed by the correlator (paragraph

0032). Thereafter, the correlation results are analyzed to determine which correlator provides the best correlation result for the particular code signals and in operation, when the phase is input, the controller assigns the best correlator(s) for that phase to perform the correlation process.

In contrast to the present claimed invention, the same code signals are not provided to all of the correlators in first and second correlations in Arima. Rather, different code signals are provided to the correlators, i.e., different portions of the code signals are provided to each correlator for the purpose of determining which portions are best processed by each correlator. There is no suggestion in Arima to perform the iterative correlation process as set forth in the present claimed invention wherein the number of correlators is reduced from one set of correlations to the next while the length of identical code signals being processed by the correlators in each set of correlations is increased.

None of the other references of record close the gap between the present claimed invention as defined by independent claims 1, 6, 11, 12 and 13.

In view of the foregoing, independent claims 1, 6, 11, 12 and 13 are patentable over Lee et al., Arima and all of the other references of record when taken either alone under 35 USC 102 or in combination under 35 USC 103.

Claims 2-5 and 7-10 are either directly or indirectly dependent on claim 1 or claim 6 and are patentable over the references of record in view of their dependence on claim 1 or claim 6 and because the references of record do not disclose, teach or suggest each of the limitations set forth in claims 2-5 and 7-10.

In view of the foregoing, it is respectfully submitted that the Examiner's rejections of claims 1-13 under 35 USC 102 or 35 USC 103 have been overcome and should be withdrawn and that claims 1-13 are in form for immediate allowance, which action is earnestly solicited.

NEW CLAIMS

Claims 14-20 are presented and are directed to additional features of the invention described in the specification. No new matter is introduced by the presentation of claims 14-20 and no additional fees are due. If any additional fees are due, please charge Deposit Account No. 14-1270 for such sum.

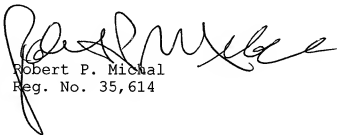
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If the Examiner disagrees with any of the foregoing, the Examiner is respectfully requested to point out where there is support for a contrary view.

Entry of the amendment, allowance of the claims, and the passing of the application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,



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Encls.: Two annotated sheets showing changes to drawings (Figs. 1 and 2)